

CLAIMS

1. A capacitor element comprising: an anode chip body including
a porous sintered body formed by sintering valve metal powder
5 into a rectangular parallelepiped having four side surfaces,
a first end surface and a second end surface which is opposite
from the first end surface, and an anode wire fixed to the first
end surface; a dielectric film formed on the metal powder of
the anode chip body; a solid electrolyte layer formed on the
10 dielectric film; and a cathode-side electrode film formed on
the anode chip body via the solid electrolyte film;

wherein at least two of four edges of the anode chip body
at which the four side surfaces meet the second end surface
are rounded or chamfered, the two edges being parallel with
15 each other.

2. The capacitor element according to claim 1, wherein the number
of edges of the solid electrolytic capacitor which are rounded
or chamfered is two.

20 3. A method of making a capacitor element of a solid electrolytic
capacitor, comprising the steps of: preparing an anode chip
body including a porous sintered body formed by sintering valve
metal powder into a rectangular parallelepiped having four side
25 surfaces, a first end surface and a second end surface which
is opposite from the first end surface, and an anode wire fixed
to the first end surface, the anode chip body being so formed

that at least two of four edges at which the four side surfaces meet the second end surface are chamfered or rounded, the two edges being parallel with each other; forming a dielectric film on the metal powder of the anode chip body; forming a solid electrolyte layer by immersing the anode chip body in an electrolyte solution with the anode wire oriented upward, pulling the anode chip body from the solution followed by baking the anode chip body; and forming a cathode-side electrode film of a metal paste on the anode chip body via the solid electrolyte layer.

4. A solid electrolytic capacitor comprising: an anode lead terminal plate, a cathode lead terminal plate, and a capacitor element arranged between the anode lead terminal plate and the cathode lead terminal plate; the capacitor element comprising an anode chip body including a porous sintered body formed by sintering valve metal powder into a rectangular parallelepiped having four side surfaces, a first end surface and a second end surface which is opposite from the first end surface, an anode wire fixed to the first end surface, a dielectric film formed on the metal powder of the anode chip body, a solid electrolyte layer formed on the dielectric film, and a cathode-side electrode film formed on the anode chip body via the solid electrolyte film; the anode wire of the capacitor element being fixed to the anode lead terminal plate, the cathode-side electrode film being electrically connected to the cathode lead terminal plate;

wherein at least two of four edges of the anode chip body at which the four side surfaces meet the second end surface are rounded or chamfered, the two edges being parallel with each other.

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5. The solid electrolytic capacitor according to claim 4, wherein the capacitor element is so arranged that at least two of the four side surfaces of the anode chip body extend in parallel or generally in parallel with obverse surfaces of the two lead terminal plates, the edges at which the two side surfaces meet the second end surface being rounded or chamfered.

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